

## Claims

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (New) Process for assembly of metallic parts by melting a filler

material, characterized in that it consists of:

heating the assembly by induction heating;

using a powder as a filler material characterized in that the material from which the parts are made and the material from which the powder is made are the same, in order to make the assembly without a new phase being formed by diffusion with a melting temperature lower than the melting temperature of the parts.

5. (New) The assembly process according to claim 4, characterized in that the powder is compacted before it is inserted between the two metallic parts.